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A NEW DEEP-SEA CRAB OF THE GENUS *CHACEON* FROM CHILE (CRUSTACEA, DECAPODA, GERYONIDAE)

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Abstract.—*Chaceon chilensis,* a large species with five anterolateral teeth on the carapace and narrow, compressed dactyli on the walking legs, is described from localities off Chile, the Juan Fernández Islands, and Isla San Félix. It is the only Recent East Pacific species of the genus.

Until recently, carcinologists working with deep-sea crabs of the genus *Chaceon* from localities around the world often have identified their material with the West Atlantic *C. quinquedens* (Smith, 1879), or the East Atlantic *C. affinis* (A. Milne Edwards & Bouvier, 1894); both of these species formerly had been assigned to the genus *Geryon* (see Manning & Holthuis 1989). A species of *Chaceon* from off Chile has been identified erroneously in the past with both of these species. We describe the Chilean species as new herein.

The holotype and several paratypes are in the Museo Nacional de Historia Natural, Santiago (MNHN). Other paratypes are in the collections of the Museo Instituto de Zoología, Universidad Austral de Chile, Valdivia (MIZUA), the National Museum of Natural History, Smithsonian Institution, Washington (USNM), the Instituto de Oceanología, Universidad Católica de Valparaíso, Valparaíso (IOUV), the Museo de Zoología, Universidad de Concepción (MZUC), and the Museo de Historia Natural, Valparaíso (MHNV).

We use cl for carapace length, measured on the midline, and cb for carapace breadth, measured at and including the fifth anterolateral spines, m for meter(s), and mm for millimeters.

Chaceon chilensis, new species
Figs. 1–2

Geryon affinis.—Dupré, 1975:34.—Báez & Andrade, 1977:215.—Andrade & Báez, 1980:263, 264.—Chirino-Gálvez, 1985: R126.—Báez & Ruiz, 1985:103. [Not *Geryon affinis* A. Milne Edwards & Bouvier, 1894.]

Geryon quinquedens.—Retamal, 1977:249, 250, fig. 1; 1981:33, fig. 179. [Not *Geryon quinquedens* Smith, 1879.]

Previous records.—Chile: Zapallar, 33°34′S, 71°38′W, 380–450 m (Báez & Andrade 1977).—Central Chile, taken in fishery for *Heterocarpus reedi* Bahamonde (Andrade & Báez 1980).

Juan Fernández Islands: Juan Fernández Islands [33°00′S, 80°00′W] (Retamal 1977, Báez & Ruiz 1985).—Isla Alejandro Selkirk [33°45′S, 80°46′W] (Chirino-Gálvez 1985).—East of Isla Robinson Crusoe and near Isla Santa Clara [33°42′S, 79°00′W] (Dupré 1975).

Isla San Félix (Báez & Ruiz 1985).

Material.—Chile: Off Chile, 33°35′S, 77°42.2′W, 370 m: 3 males (in 3 lots, MNHN D-10824, D-10825, D-10875).—Isla San Félix, 26°16′S, 80°00′W, 27 May 1969, in lobster traps: one male (cl 126.8 mm, cb 145.5 mm, holotype, MNHN D-10821).—Off Quintero [32°47′S, 71°32′W], 400 m: one male (IOUV C-005).—Off Zapallar [32°33′S, 71°29′W], 400 m: one female (IOUV C-003).—Off Zapallar, 360–400 m: one male (MHNV).—Islas Juan Fernández: Isla Robinson Crusoe [33°38′S, 78°52′W]: three males (IOUV C-001, C-002, C-004).—Isla Robinson Crusoe, 270–300 m: one specimen (MZUC).—Off Caleta Sánchez, Isla Alejandro Selkirk, 150 m, in lobster

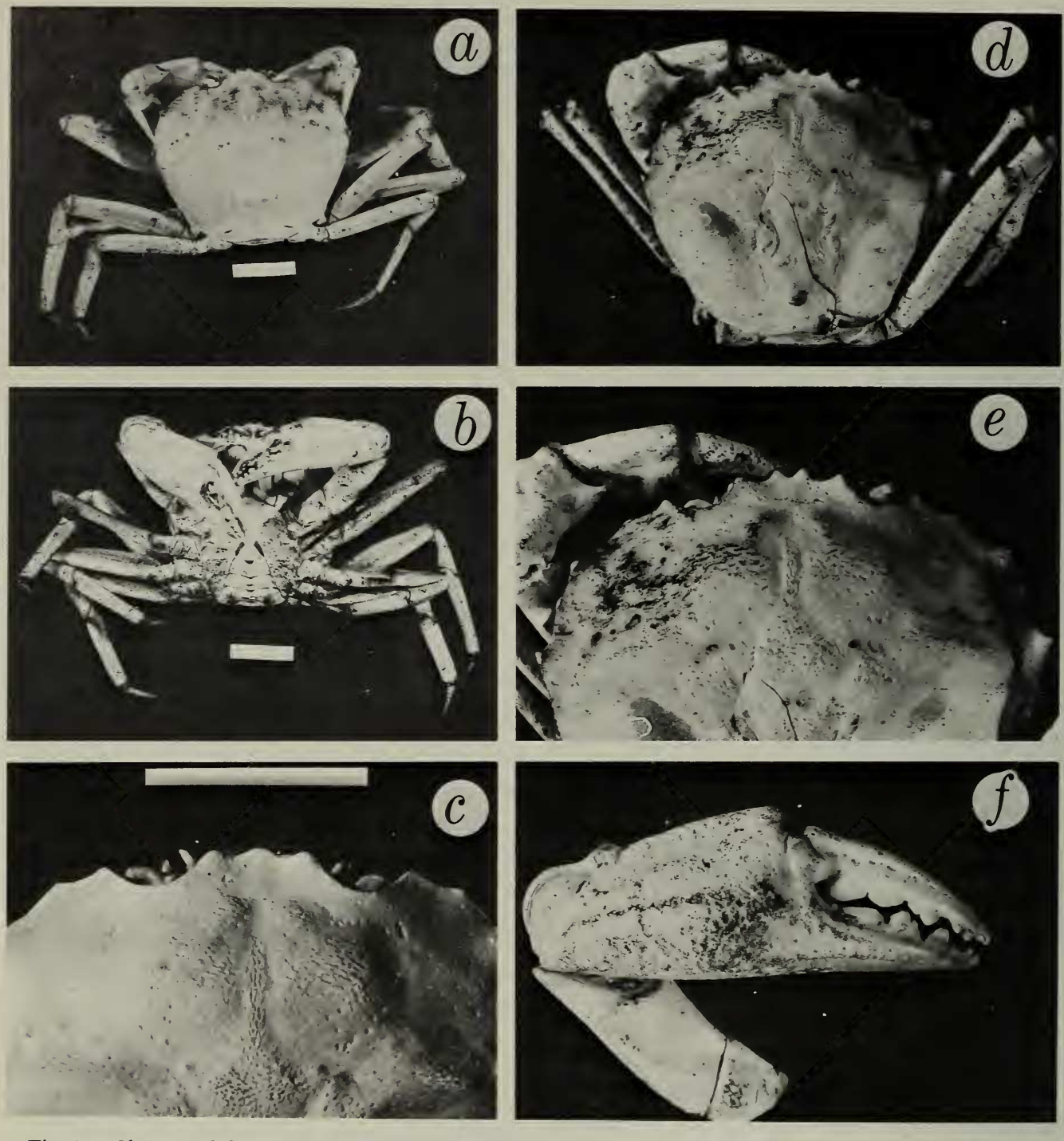

Fig. 1. *Chaceon chilensis,* new species. Male holotype, cl 127 mm, Isla San Félix: *a,* dorsal view; *b,* ventral view. Male paratype, cl 120.5 mm, off Chile: *c,* front. Male paratype, cl 115 mm, off Caleta Sánchez: *d,* dorsal view; *e,* anterior part of carapace; *f,* cheliped.

traps, 1985, associated with *Jasus frontalis* (H. Milne Edwards) and *Paramola rathbuni* Porter: one male, one female (USNM 205697), one male (MIZUA C-688).

All specimens other than the holotype are paratypes.

Description.—A large *Chaceon,* cl to 152 mm, cb to 175 mm in adults, with five anterolateral teeth on the carapace and laterally compressed dactyli on the walking legs. Carapace broader than long, breadth 1.0–1.2 times length, inflated anteriorly, especially at protogastric regions. Median pair of frontal teeth large, separated by broad, V-shaped sinus, overreaching similar lateral frontal teeth. Distance between submedian

frontal teeth less than distance between them and lateral frontal teeth. Second and fourth anterolateral teeth more obtuse and lower than first, third, and fifth teeth. Distance between first and third teeth subequal to distance from third to fifth, distance between first and second teeth much less than from second to third. Suborbital tooth visible in dorsal view, not extending to apex of lateral frontal tooth. Carapace with curved ridge extending mesially from each fifth lateral tooth, surface, except for gastric, and branchial regions, especially granular. Cheliped rough dorsally, with blunt subdistal tooth dorsally on merus, carpus lacking outer spine but with well-developed triangular inner spine, propodus lacking distal dorsal spine. Meri of walking legs lacking distal dorsal spine. Fifth leg: merus broad, length five times height, about two-thirds cb (0.61–0.65); propodus broad, length about four times height; dactylus about four-fifths as long as propodus. Dactyli of walking legs compressed, narrow, height at midlength much greater than width.

Size.—Males, cl 107 to 152 mm, cb 124 to 174.5 mm; females, cl 102 to 124.5 mm, cb 112 to 151 mm. Báez & Ruiz (1985) recorded males with cl ranging from 105.8 to 124 mm, cb from 120.8 to 144.3 mm. Báez & Andrade (1977) reported a specimen with cl 152.1 mm, cb 174.5 mm, and Retamal (1977) studied a specimen measuring cl 120 mm, cb 140 mm.

Remarks.—This new species resembles *C. fenneri* (Manning & Holthuis, 1984) in general appearance, but differs in numerous features. It is a longer-legged species, with the merus of the fifth leg greater than 0.6 of the carapace breadth (less than 0.6 in *C. fenneri*), and, although the legs are longer, the dactylus is shorter. The dorsal ridge on the carpus of the walking legs is much smoother. The carapace is more inflated dorsally and more rounded posterolaterally, and is much more granular. The median frontal teeth extend further forward. The suborbital margin is shaped differently: it is evenly curved in *C. chilensis,* flattened for much of its length in *C. fenneri.*

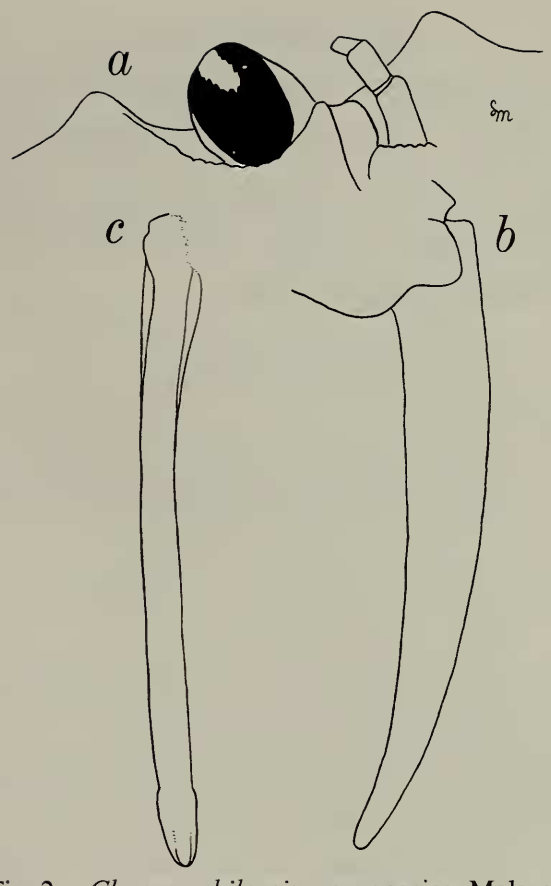

Fig. 2. *Chaceon chilensis,* new species. Male paratype, cl 115 mm, off Caleta Sánchez. *a,* orbit, ventral view; *b,* propodus of fifth leg, posterior view; *c,* same, dorsal view.

One of the specimens (MNHN D-10875) has but three frontal teeth; it is shown in Fig. 1*f.*

N. Bahamonde N., in a letter of 8 August 1973 to John S. Garth, commented that the fishermen called this species "jaiba blanca," because of its light color in life.

Retamal (1981) called this species "cangrejo de profundidad." There are records in the literature from the following depths: 270–300 m (Dupré 1975, Retamal 1977); 380–450 m (Báez & Andrade 1977); 200–2000 m, in fishery for *Heterocarpus reedi* Bahamonde (Andrade & Báez 1980).

Etymology.—The specific name reflects the known geographic range of the species, from localities off central Chile.

Distribution.—Known only from localities off central Chile, including the Juan Fernández Islands and Isla San Félix.

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